

From the Author

ON

COLD-BATHING,

CONSIDERED IN ITS PURGATIVE EFFECT,

IN FEVER, DYSPEPSIA, CHOLERA, TETANUS, AND IN THE

TREATMENT OF INFANTS.

Extracted from Dr Hamilton's Observations on the Utility and Administration

of Purgative Medicines.—Eighth Edition. Not yet published

1826



EDINBURGH

THE HISTORY OF MEDICAL SCIENCE

WITH A HISTORY OF ANATOMY, PHYSIOLOGY, AND MEDICAL SCIENCE

IN THE FORM OF A HISTORY

EDINBURGH:

PRINTED BY JAMES WALKER.

ON COLD-BATHING, CONSIDERED IN ITS PURGATIVE
EFFECT, IN FEVER, DYSPEPSIA, CHOLERA, TETANUS,
AND IN THE TREATMENT OF INFANTS.

THE acquiescence of medical men in the general prepossession, confirms the popular opinion, that the efficacy of cold-bathing proceeds exclusively from its tonic or bracing powers.

It may be presumptuous in any one to question this doctrine, established for a length of time, and in full possession of the public mind. Nevertheless, till cases of direct debility are ascertained to exist, to which this tonic power is applicable, and while other circumstances readily explain the influence of the cold-bath in the cure and prevention of some diseases, it will not be unreasonable to suspend

our assent to a supposition, which, in its narrow and limited view, sanctions the indiscriminate use of cold-bathing.

The remarks which I have to make on this subject, result from the practice which I have recommended, and from the doctrines which I have proposed in the foregoing observations.

An occasional interchange of their functions is a consequence of the connexion which subsists among the excretory organs of the body, page 11. To this interchange it is owing that different applications to the surface move the belly. Among these, that of cold water is conspicuous, whether it be made by sponging, affusion, or by resorting to the cold-bath.

Pathological facts, and the experience of those who, enjoying good health, bathe for amusement, prove the alvine evacuation to be promoted by the aspersion of, or by immersion into cold water. This effect, how greatly soever it merits attention, and however much it ought to regulate the practice of cold-bathing, both in health and in disease, has been, in a great measure, if not altogether, overlooked by late writers on the popular and interesting subject.

of the application of cold water to the surface of the body.

To this obvious effect on the alimentary canal, however, the benefit derived in Fever from sponging with, or from the affusion of cold water, may, in part at least, be attributed.

An agreeable sensation of coolness, a lowering of the pulse, a disposition to sleep, and to perspire, are the immediate consequences ; and abatement of sickness, of anxiety, and thirst, and cleaning of the loaded tongue, the subsequent effects of the impression made on the surface. By this the peristaltic movement of the intestines, retarded or suspended during the febrile state, is excited, and accumulated and noxious feces are propelled and evacuated. The repetition of the sponging or affusion, as it is generally practised, promotes the further expulsion of feces ; at any rate it will co-operate with mild purgatives, and secure daily a moderate alvine evacuation, so necessary at all times to the well conducting the cure of fever.

OF a character distinct from those of fever, is a train of symptoms, which admit with difficulty of nosological arrangement. They bear some resemblance to those of chlorosis and hysteria, and, in particular constitutions, to those of hypochondriasis. Although not of dangerous tendency, they occasion much bodily and mental suffering. They are recognised by impaired appetite, nausea, sickness, flatulence, and acidity of stomach, and most commonly by constipation of the bowels. Digestion is thus disturbed, the assimilation of nourishment impaired, and the absorption and transmission of it are interrupted. Prostration of strength, depression of spirits, and irregular exertion of the powers of the mind, are the consequences.

Idiosyncracy, habits of life, particular employments, and improper indulgencies, have their share in introducing the above symptoms, which have been explained agreeably to the doctrines entertained by the supporters of the different sects which have prevailed in medicine. The late Dr Cullen was the first who attempted to classify these symptoms, and

to arrange them as a genus, under the name of dyspepsia ; the proximate cause of which he considered to be “ imbecility, loss of tone, and weakness of the muscular fibres of the stomach.” *First Lines, edition 1789, paragraph 1193.*

The latter symptoms of the ailment may have suggested this doctrine, which, nevertheless, does not appear to be supported by facts. Under the view, however, which it presents, the usual routine of practice, by what are understood to be tonic medicines, bitters, astringents, and chalybeates, and by anti-spasmodics and anodynes, is continued. The two last of these, while they are palliatives only of particular symptoms, may introduce injurious habits ; and the former often disappoint expectation, and by protracted use aggravate the supposed loss of tone, in place of remedying it. *First Lines, paragraph 1214.*

The medical inquirer is thus left in a dilemma ; either the debility of the muscular fibres of the stomach does not exist, or the tonic medicines do not possess the virtues attributed to them.

The constipation of the body, which has been no-

ticed, may be considered a leading symptom in idiopathic dyspepsia. When of some duration, it first impedes, and then inverts the peristaltic motion of the alimentary canal, and thus occasions the stomachic symptoms. Of course, the removal of constipation will give immediate relief, and the preservation of an open state of the body ultimately effect a more or less perfect cure.

Among other tonics, operating, as it is supposed, upon the general system, and through it upon the weakened muscular fibres of the stomach, the cold-bath is mentioned. Much dependence is placed upon it, and justly so ; but not, in my opinion, on account of its more than doubtful tonic powers, but on account of the impression made on the surface being communicated to the bowels, by which their languid action is excited, with a propensity to evacuate their retained contents.

The repetition of the bath, at proper intervals, confirms and establishes this propensity.

The healthy state of the chylopoëtic viscera is thus restored : appetite for food and powers of digestion are recovered, and assimilation, absorption,

and transmission of nourishment promoted. Health of body and peace of mind are the consequences.

THE influence of the solar heat in the equatorial regions, and in the lower tropical latitudes, and the warmth of summer in more temperate climates, increase the flow of perspiration, and cause a proportional diminution of the excretions from the internal organs.

The intestinal canal, thus deprived, in a great measure, of the usual stimulus from these excretions, acts with less energy, and is exposed, more or less, to a certain degree of constipation. Under these circumstances, unguarded exposure to the dews of the evening, to the cold of the night and of the morning, to currents of cold air, or to the diminished temperature which in autumn succeeds to the heat of summer, will give a sudden check to this increased perspiration, and determine its course inwards. The impression thus made on the intestines, unequal, on the instant, to remedy their torpid and constipated state, occasions irregularity in their action, with bilious and other accumulations, the precursors of cholera and tetanus, the acknowledged diseases of hot countries and during warm seasons.

If these views be correct, we may presume, that a regular stimulus operating on the bowels will counteract this torpor and constipation. Such stimulus, it is apprehended, will be found in sponging with cold water, in the affusion of the same over the body, or in immersion in the cold bath. Any of these should be daily practised by those who are exposed to extreme heat, either of climate or of season ; they are safe, and may prove prophylactic of the consequences of such exposure.

THE young of the human species are interesting objects of attention : their helpless state demands assiduous care, that proper nourishment be provided for them, their wants supplied, and danger to which they may be occasionally exposed averted. In certain ranks of life this charge devolves, in a great measure, on the wet nurse, or superintendent of the nursery. With them the first essay is made for promoting the health of the young stranger, who, for this purpose, at a time almost coeval with his existence, is subjected to the ordeal of cold water. The opinion that it promotes strength and growth sanctions this practice, which, notwithstanding the aversion which the child betrays, so soon as he is

capable of noticing the preparation for the bath, notwithstanding the writhing and screaming which proclaim his suffering during his protracted detention in the cold element, is followed up from day to day with unrelenting pertinacity.

It must be obvious that an infant requires only moderately warm clothing, a sufficient supply of light nourishing food, and free access at all times to pure air, that he may continue in health, and grow in strength. The irritation generally excited by plunging into cold water, and an idiosyncrasy, not observed in early youth, but which, at every period of life, is an objection to cold-bathing, may frustrate these desirable ends. Indeed, were it fully ascertained, that the contact of cold water has, in any case, a direct tonic and bracing effect; yet surely this is not wanted in early life, when causes inducing depression of mind, or weakness of body, cannot be supposed to influence the health.

If this bathing of infants has the ablution of the surface, an object of great importance, in view, it will be accomplished more effectually and safely by employing warm water, in which the child delights, and in which he loves to linger.

It is not intended, by these observations, to exclude entirely the practice of cold-bathing, as unsuitable to children, but to attempt to bring it under proper regulations. The occasional and momentary immersion into cold water will promote the alvine excretions, a circumstance essential to the health of an infant : it will obviate tendency to constipation, which is highly injurious to him, and supersede the necessity of giving purgative medicines, which are exhibited with difficulty, and taken with aversion and disgust.

IN the prosecution of cold-bathing, a few particulars merit attention.

The invalid bather should proceed on medical advice. There are some to whom, from peculiarity of constitution, the practice is injurious ; and topical affections, not always obvious to a common observer, may prove a bar to it.

Exercise, to promote a moderate warmth of the surface previous to bathing, will make the impression from it more effectual. Exercise to the same extent may be useful after bathing.

It may be proper to procure the effect of a purgative medicine before the first essay in bathing. The laxative effect of the practice should be afterwards carefully observed : if it does not take place, the invalide should pause, as in this case the effect of bathing is of more than doubtful issue.

The temperature of the water should be considerably lower than the natural heat of the body : Its holding saline impregnation in solution is of minor importance.

A sufficient body of water should be provided, to admit of a free plunge into it, while the means of retiring quickly are not overlooked : the momentary impression is salutary : delay in the water is unnecessary, often prejudicial.

Regimen, in respect of diet, exercise and clothing, during a course of cold-bathing, must be adapted to particular cases ; but the discussion of these, as foreign to the present subject, would be out of place.

and the following morning at noon had gone to
quarantine at the Hillside Hotel in about twelve
miles of the village. The following morning with
Gandy and two others of us, I borrowed a boat and
rowed out to the village and the following day
spent the day in the village.

On the 12th I took a boat to the village and
spent the day there. I took a boat to the village
again on the 13th and the following day I took a boat
to the village.

On the 14th I took a boat to the village and
spent the day there. I took a boat to the village
again on the 15th and the following day I took a boat
to the village. I took a boat to the village
again on the 16th and the following day I took a boat
to the village.

On the 17th I took a boat to the village and
spent the day there. I took a boat to the village
again on the 18th and the following day I took a boat
to the village. I took a boat to the village
again on the 19th and the following day I took a boat
to the village.